# UNITED STATES PATENT AND TRADEMARK OFFICE

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| 10/732,745 | 12/11/2003 | Esa Malkamaki | 47092.00064 | 6526 |

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| EXAMINER |
|---|
| RIZK, SAMIR WADIE |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2133 | |

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/732,745 | MALKAMAKI ET AL. |
| | Examiner | Art Unit | |
| | Sam Rizk | 2133 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)☒ Responsive to communication(s) filed on <u>11 December 2003</u>.

2a)☐ This action is **FINAL**.     2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)☒ Claim(s) <u>1-36</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-36</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>11 December 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All  b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>4/15/2005</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTIONS

- Claims 1-36 have been submitted for examination

- Claims 1-36 have been rejected

### Claim Rejections - 35 USC § 112

1.    Regarding claim 12, the phrase "substantially" renders the claim 12 indefinite

because the claim 12 includes elements **not actually disclosed** (those

encompassed by "substantially"), thereby rendering the scope of the claims

unascertainable.  See MPEP § 2173.05(d).

The Examiner notes the phrase "substantially" has not been defined in the

specification to enable person skilled in the art to limit the range of transmission

broadcast to all or substantially all of the "terminal devices".

### Claim Objections

2.    Claim 31 is objected to under 37 CFR 1.75(c), as being of improper dependent

form for failing to further limit the subject matter of a previous claim.  Applicant is

required to cancel the claim(s), or amend the claim(s) to place the claim(s) in

proper dependent form, or rewrite the claim(s) in independent form.

The Examiner notes that the transmitting strategy information as in claim 31 or

the transmitting information as in claim 1 are equally same limitation to indicate

the selection of at **least one sequence to said terminal device.**

3.    Claim 32 is objected to for the same reasons as per claim 31

4.    Claim 33 is objected to for the same reasons as per claim 31

5.      Claim 34 is objected to for the same reasons as per claim 31

6.      Claim 35 is objected to for the same reasons as per claim 31

7.      Claim 36 is objected to for the same reasons as per claim 31


## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

8.      Claims 1,2,6-8,11,16,23,28,29 and 31-35 are rejected under 35 U.S.C. 102(e) as

being anticipated by Golitschek et al. US patent 6892341 (Hereinafter

Golitschek).

9.      In regard to claim 1, Golitschek teaches:

        -       (Currently Amended) A method of providing redundancy parameters

                for an automatic repeat request processing at a terminal device, said

                method comprising the steps of:

        (Note: FIG. 5 in Golitschek)

        -       providing a set of predetermined sequences of redundancy

                parameters;

        (Note: FIG. 6, reference character (15) in Golitschek)

-   selecting at least one of said set of predetermined sequences; and

(Note: col. 11, lines (5-10) in Golitschek)

-   transmitting information indicating the selected at least one sequence

to said terminal device.

(Note: Figure 5, reference characters (15) & (13) and col. 10, lines (63-67)

through col. 11, lines (1-4) in Golitschek)

10.      In regard to claim 2, Golitschek teaches:

-   (Currently Amended) The method according to claim 1, further

comprising the step of:

-   providing said information comprising at least one of an index and a

pointer to said selected at least one predetermined sequence.

(Note: FIG. 6, reference character (15) in Golitschek)

11.   In regard to claim 6, Golitschek teaches:

-   (Original) The method according to claim 3, further comprising the step

of:

-   using an outband signaling for notifying about redundancy parameters

used from said selected at least one sequence.

(Note: Figure 6 in Golitschek)

12.   In regard to claim 7, Golitschek teaches:

-   (Original) The method according to claim 1, wherein said transmitting

step is performed at a beginning of a connection.

(Note: Figure 5 in Golitschek)

13.     In regard to claim 8, Golitschek teaches:

- (Original) The method according to claim 1, wherein, in said providing

    step, said set of predetermined sequences comprises a predefined

    fixed set.

(Note: Figure 5, reference character (15) in Golitschek)

14.     In regard to claim 11, Golitschek teaches:

- (Currently Amended) The method according to claim I, wherein, in

    said transmitting step, said information comprises said sequence of

    redundancy parameters.

(Note: Figure 6, Golitschek)

15.     In regard to claim 16, Golitschek teaches:

- (Currently Amended) A terminal device for applying a redundancy

    strategy to an automatic repeat request function, said terminal device

    comprising:

- receiving means for receiving information indicating a selected

    sequence of redundancy parameters; and

- parameter generating means, operably connected to said receiving

    means, for

(Note: Figure 5, reference characters (21) & (22) in Golitschek)

- generating said selected sequence of redundancy parameters for said

    automatic repeat request function in response to receipt of said

    information.

(Note: Figure 5, reference characters (15) in Golitschek)

16.    Claim 23, 32 and 33 are rejected for the same reasons as per claim 16.

17.    Claims 28, 29 and 30 and 31,34 and 35 are rejected for the same reasons as per

claim 1.


### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.    Determining the scope and contents of the prior art.
2.    Ascertaining the differences between the prior art and the claims at issue.
3.    Resolving the level of ordinary skill in the pertinent art.
4.    Considering objective evidence present in the application indicating
       obviousness or nonobviousness.

18.    Claims 3,4,5,9,10,12-15,17-22 and 25-27 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Golitschek as applied to claim 1 above, and further in

view of Kinjo et al. US publication no. 2003/0133497 (Hereinafter Kinjo).

19.    In regard to claim 3, Golitschek teaches substantially all the limitations in claim 1.

However,  Golitschek does not teach

- (Original) The method according to claim 1, wherein said transmitting step is performed by using a higher layer signaling.

Kinjo in an analogous art that teaches incremental redundancy using two stage rate matching for automatic repeat request to obtain high speed transmission teaches:

- (Original) The method according to claim 1, wherein said transmitting step is performed by using a higher layer signaling.

(Note: FIG. 3 in Kinjo)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Golitschek with the teaching of Kinjo by including the details of uplink layer signaling protocol.

This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized the need to obtain transmitting high volume non-voice data in HSDPA protocol.

20.    In regard to claim 4, Kinjo teaches:

- (Original) The method according to claim 3, wherein, in said transmitting step, said higher layer signaling comprises Radio Resource Control signaling.

(Note: section [0022] in Kinjo)

21.    In regard to claim 5, Kinjo

- (Original) The method according to claim 3, further comprising the step

 of:

- using an outband signaling for notifying about redundancy parameters

 used from said selected at least one sequence.

(Note: FIG 4 in Kinjo)

22.     In regard to claim 9, Kinjo teaches:

- (Original) The method according to claim 1, wherein, in said providing

 step, said redundancy parameters comprise a first parameter defining

 a self-decodable redundancy version and a second parameter

 defining bits which are to be punctured.

(Note: Abstract in Kinjo)

23.     In regard to claim 10, Kinjo teaches:

- (Original) The method according to claim 1, wherein, in said providing

 step, said set of predetermined sequences comprise sequences

 relating to at least one of a chase combining strategy, a partial

 incremental redundancy strategy, and a full incremental redundancy

 strategy.

(Note: Section [0022] in Kinjo)

24.     In regard to claim 12, Kinjo teaches:

- (Currently Amended) The method according to claim 1, wherein

 said transmission step is performed by broadcasting said strategy

information to substantially all terminal devices located within a

predetermined area.

(Note: FIG. 1, in Kinjo)

25.     In regard to claim 13, Kinjo teaches:

- (Currently Amended) The method according to claim 12, wherein

said transmission step is performed by broadcasting said information

to all terminal devices located within a predetermined area.

(Note: FIG. 1, in Kinjo)

26.     In regard to claim 14, Kinjo teaches:

- (Original) The method according to claim 1, wherein said transmitting

step is performed via a wireless communication link.

(Note: FIG. 1, in Kinjo)

27.     In regard to claim 15, Kinjo teaches:

- (Original) The method according to claim 1, further comprising the step

of:

- performing said automatic repeat request processing for a data

transmission on an enhanced uplink dedicated channel.

(Note: Section [0032], line 10 in Kinjo)

28.     Claim 17 is rejected for the same reasons as per claim 15.

29.     Claim 18 is rejected for the same reasons as per claim 4.

30.     Claims 19 and 24 are rejected for the same reasons as per claim 5.

31.     Claim 20 is rejected for the same reasons as per claim 6.

32.      Claim 21 is rejected for the same reasons as per claim 9.

33.      In regard to claim 22, Kinjo teaches:

- (Currently Amended) The terminal device according to claim 16,

   further comprising storing means, operably connected to said receiving

   means, for storing a set of sequences of redundancy parameters and

   wherein said information comprises at least one of a pointer and an

   index to said stored set of sequences.

   (Note: FIG. 4, reference character (96) in Kinjo)

34.      Claim 25 is rejected for the same reasons as per claim 14.

35.      Claim 26 is rejected for the same reasons as per claim 25.

36.      In regard to claim 27, Kinjo teaches:

- (Original) The network device according to claim 23, wherein said

   network device comprises at least one of a base station device and a

   radio network controller device.

   (Note: FIG. 1 in Kinjo)

### Conclusion

37.    The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

-      Wengerter et al. US publication no. 2005/0163040 teaches

   constellation rearrangement for transmit diversity scheme.

-      Golitschek et al US patent no. 7111219 teaches data transmission

   apparatus using a constellation rearrangement.

- ARO retransmission with reordering scheme employing multiple redundancy versions and receiver/transmitter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Rizk whose telephone number is (571) 272-8191. The examiner can normally be reached on M-F 8-5.
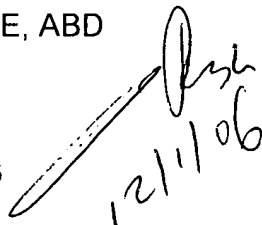
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.
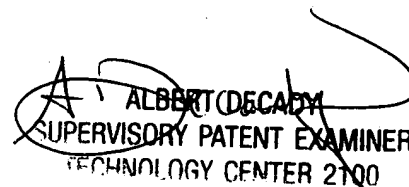
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronics Business Center (EBC) at 866-217-9197 (toll-free)

Sam Rizk, MSEE, ABD

Examiner

ART UNIT 2133

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